

ANNOTATIONES ZOOLOGICAE JAPONENSES

Volume 35, No. 1—March 1962

Published by the Zoological Society of Japan
Zoological Institute, Tokyo University

A New Genus *Zipanginia*, with the Descriptions of a New
Species and a New Subspecies (Coleoptera,
Chrysomelidae, Alticinae)¹⁾

With 2 Text-figures

Masao OHNO

Biology Laboratory, Toyo University, Tokyo
(Communicated by M. UENO)

Zipanginia gen. nov.

Body oblong-ovate, convex, and winged; frontal tubercles somewhat prominent, obliquely situated, and subtriangular, with a pointed process extending to the interantennal space; post-clypeus triangular, rather distinctly raised, with the upper end extending a little behind the interantennal space and produced posteriorly so as to separate the anterior parts of frontal tubercles; antennae subfiliform, not longer than the body; pronotum subquadrate, about a half broader than long, anterior angles obliquely and rather broadly truncate, disk strongly convex, with a shallow antero-basal transverse depression (the depression is strongly sinuate towards the base in the middle and terminated at either end by an longitudinal linear impression which runs upwards); scutellum subtriangular, with the apex rounded, and not covered with hairs or punctures on its surface; elytra broader at the base than prothorax, ovate, somewhat convex, finely and confusedly punctured; epipleuron obliquely situated, not reaching the apex of elytron, with the surface usually flat, but often channeled in its basal half; anterior coxal cavities opened behind, prosternal process comparatively narrow, mesosternal process distinctly broader than prosternal process, with the posterior margin gently emarginated and the surface nearly flat; intercoxal projection of 1st abdominal sternite without distinct carinae or ridges on its surface; hind femora strongly incrassate, hind tibiae subcylindrical, with the apical short extent of the external face plain and furnished at the apex with a small spine; 1st segment of posterior tarsi subequal in length to the following two combined together; claws appendiculate.

In the male, the last abdominal sternite with a posteriorly produced part in

1) Studies on the Flea-beetles of Japan (6).

the middle of its posterior margin.

Genotype: *Graptodera picipes* Baly (1874).

Range: Japan and Ryukyu.

The present new genus is closely allied to *Trachyaphthona*, but may be separated from it in the following points:—

The area between the interantennal space and frontal tubercles without fovea or depression, the surface of which is like shagreen or reticulated; frontal tubercles obliquely situated; antero-basal transverse depression much more strongly sinuated towards the base and terminated at either end by an longitudinal linear impression which runs upwards; prosternal process comparatively narrow; mesosternal process with the posterior margin distinctly emarginated, etc.

From *Ogloblinia* (which is also a closely related genus) the present new genus may be distinguished by the following characters:—

Mesosternal process not excavated, the surface not smooth but nearly flat and wrinkled transversely; surface of intercoxal projection of 1st abdominal sternite without carinae or ridges; body not so strongly convex dorsally, etc.

KEY TO SPECIES AND SUBSPECIES

- 1 (2) Body above entirely dark metallic green, with the four anterior legs and the posterior tibiae and tarsi entirely reddish brown; extreme apex of each elytron rounded; elytral epipleura almost reaching the apex of elytron....
..... *Z. loochooensis* sp. nov.
- 2 (1) Body above dark piceous to black, with the legs more or less piceous partly; extreme apex of each elytron more or less truncate; elytral epipleura not reaching the apex of elytron, but a little before the latter3
- 3 (4) Pronotum about 1.5 times as broad as long, sides gently rounded; frons nearly smooth and impunctate; surface of elytral epipleuron nearly flat in its whole length; mesosternal process not distinctly narrowed posteriorly
..... *Z. picipes picipes* (Baly)
- 4 (3) Pronotum about 1.3 times as broad as long, sides straight and parallel; vertex and frons (except post-clypeus and frontal tubercles) rather distinctly shagreen-like; surface of elytral epipleuron rather distinctly channeled in its basal half; mesosternal process rather distinctly narrowed posteriorly
..... *Z. picipes katoi* subsp. nov.

1. *Zipanginia picipes picipes* (Baly), comb. nov.

Graptodera picipes Baly, Trans. Ent. Soc. London, p. 191 (1874) (Japan: Nagasaki).

Haltica picipes, Gemminger et Harold, Cat. Col., XII, p. 3493 (1876)—Lewis, Cat. Col. Japanese Archipel., p. 29 (1879)—Jacoby, Proc. Zool. Soc. London, p. 754 (1885)—Schoenfeldt, Cat. Col. Japan, p. 152 (1887)—Matsumura, Nippon Konchu Daizukan, p. 237, f. 690 (1931)—Chûjô, Trans. Nat. Hist. Soc. Formosa, XXVI, p. 26 (1936)—Yamamoto, Hyogo Biol., II (3), p. 136 (Honshu)—Takakura, Trans. Kita-Kyushu Ent. Soc., 3, p. 12, f. 5 (1955).

Altica picipes, Maebara, Shin-Konchu, XI (11), p. 10 (1958)—Chûjô et Kimoto,

Enum. Ins. Mt. Hikosan, II, Col., p. 66 (1959).

Ogloblinia picipes, Chûjô et Kimoto, Pacific Ins., III (1), p. 188 (1961) (Honshu, Shikoku, Kyushu).

Body narrowly oblong-ovate, nearly parallel-sided (in male) or very slightly widened posteriorly (in female), and somewhat convex. General colour dark piceous to black and shining (in a suitable light, the dorsal surface, especially elytra, with a slight metallic tinge), with antennae (except for six or seven apical segments piceous) and legs (except for femora blackish, but the apex of each femur somewhat paler) usually flavous.

Head narrower than prothorax; vertex moderately convex, nearly impunctate and smooth, with a rather large hair-bearing puncture on each side of frons near the eyes, but when seen under a high power lens to be sparsely scattered with extremely fine punctures; frontal tubercles oblique, subtriangular, with a pointed process sending to the interantennal space, somewhat prominent, contiguous to each other or a little separated from each other by a narrow longitudinal impression and delimited behind by a shallow oblique impression (but the impression often obsolete); post-clypeus subtriangular, sparsely punctate on the whole surface, interspaces of these punctures smooth and shining, upper end of post-clypeus producing towards the interantennal space with the apex rounded or feebly angulated posteriorly to insert between the anterior parts of frontal tubercles (but in some examples frontal tubercles fused with the posterior end of post-clypeus and the impression between these portions nearly obsolete). Antennae subfiliform, extending to the middle of elytra, rather densely covered with fine hairs especially towards the apex, and slightly thickened in four or five apical segments; 1st segment long and club-shaped; 2nd of similar in its shape to the preceding one, but much smaller; 3rd and four following segments slender, subequal in length to each other including three apical segments except the last, and slightly longer than 2nd; the last one somewhat longer than the preceding one and acuminate at the apex.

Pronotum transversely subquadrate, a half broader than long, sides gently rounded, anterior angles obliquely and rather broadly truncate, anterior margin nearly straight, and the basal margin slightly rounded; disk rather strongly convex, and impressed near the base with a very shallow transverse depression, which is strongly sinuate towards the base in the middle; surface of pronotum sparsely covered with minute punctures, accompanied by some slightly coarser punctures especially in its basal area, interspaces of these punctures entirely smooth and shining (the punctuation of pronotum rather variable, very feeble or nearly obsolete in some examples, but in other examples strongly impressed on the whole surface and the interspaces sparsely scattered with fine punctures). Scutellum

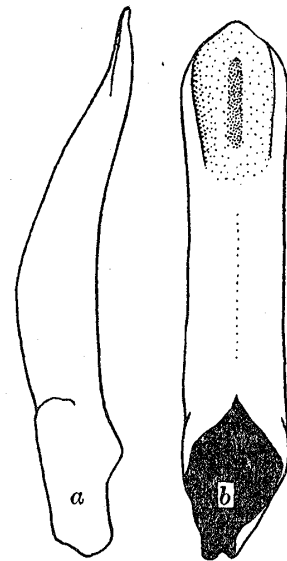


Fig. 1. Male genitalia of *Zipanginia picipes* (Baly)
a. lateral aspect,
b. ventral aspect

subtriangular, with the apex rather broadly rounded and the surface feebly reticulated especially in its basal half.

Elytra somewhat broader at the base than prothorax, rounded at the apex (but extreme apex of each elytron subtruncated), and nearly parallel-sided in its anterior half and gently narrowed posteriorly (but in the female slightly dilated a little behind towards the middle); above convex, with the humeral portion not distinctly prominent; surface of elytra finely and confusedly punctured throughout, the punctures a little stronger than those of pronotum, but nearly equal in size to the coarser punctures of pronotum; interspaces of these punctures nearly smooth and shining; furthermore, not covered with microscopical punctures but feebly and indistinctly transverse-wrinkled in part. Elytral epipleura oblique, gently narrowed posteriorly, but reaching the apex of each elytron; surface of the epipleura nearly flat, not channeled in its whole length, and nearly smooth and shining, but seen under a high power lens to be very slightly wrinkled in part and impressed with an extreme inner marginal row of fine punctures.

Underside finely pubescent. Prosternal process comparatively narrow, but distinct between the coxae, and somewhat dilated with the posterior end subtruncated; surface of the process rather strongly excavated especially in its posterior dilated area, and roughly structured. Mesosternal process broad, nearly parallel-sided, with the sides straight and indistinctly margined, and with the posterior margin gently emarginate, but not margined; surface of the sternum roughly structured, and generally wrinkled transversely in its median area.

Length: ♂, 2.0 mm; ♀, 2.0–2.2 mm.

Specimens examined: 1♂, Mt. Kammuri-dake, Kushikino, Kagoshima pref., Kyushu, Japan, 12-V-1958, H. Maebara leg.; 1♀, Isshochi, Kuma, Kagoshima pref., 4-V-1958, H. Maebara leg.; 1♀, Kawara, Kirishima, Kagoshima pref., 14-V-1958, H. Maebara leg.; 1♂, 1♀, Mt. Eboshi, Taniyama, Kagoshima pref., 23-V-1958, H. Maebara leg.; 2♂♂, 1♀, Yunono, Kirishima, Kagoshima pref., 25-V-1958, H. Maebara leg.; 3♂♂, 15♀♀, Yuyama, Kumamoto pref., Kyushu, 28-V-1959, M. Ohno leg.

Distribution: Japan (Honshu, Shikoku, Kyushu).

Food-plant: *Eleagnus multiflora* Thunb. (Jap. name: *Natsugumi*) (Eleagnaceae) (after Y. Takakura, 1955).

2. *Zipanginia picipes katoi* subsp. nov.

The present subspecies may be separated from the nominate one in the following characters:—

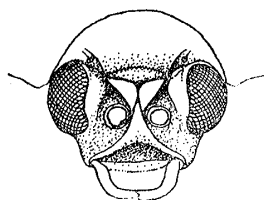


Fig. 2. Head of *Zipanginia picipes katoi* subsp. nov.

Body somewhat larger and stouter; surface of pronotum more strongly punctured, interspaces of these punctures sparsely scattered with microscopical fine punctures and distinctly wrinkled longitudinally (in the medium part), obliquely (in the latero-posterior parts), or transversely (in the basal part); lateral margin of pronotum nearly straight and parallel, not rounded, but the frontal margin slightly sinuate towards the base in the middle (not straight as in nominate one); pronotum about 1.3

times as broad as long; frontal tubercles more transversely situated; frons (post-clypeus and frontal tubercles excepted) rather distinctly shagreen-like; epipleura rather distinctly channeled in its basal halves; mesosternal process more distinctly narrowed posteriorly, etc.

Length: ♀, 2.5 mm.

Holotype: ♀, Manazuru, Kanagawa pref., Honshu, Japan, 1-V-1959, T. Kato leg. (in the author's coll.).

Distribution: Japan (Honshu).

3. *Zipanginia loochooensis* sp. nov.

Body narrowly oblong-ovate, somewhat convex; dorsal surface dark metallic green, with scutellum bluish, ventral surface black, with metasternum tinged with a slight metallic shimmer, and antennae (except for four or five apical segments more or less piceous) and legs (except for hind femora dark piceous or black, with a slight metallic shimmer) light reddish brown.

Head moderately convex, nearly impunctate and smooth, but when seen under a high power lens to be scattered with extremely fine punctures. Frontal tubercles obliquely placed, feebly prominent, subtriangular, and almost contiguous to each other; each frontal tubercle limited behind by an indistinct curved impression, but the lateral area of the tubercles rather strongly depressed. Post-clypeus subtriangular, prominent, with the posterior end angularly produced behind so as to separate the anterior parts of frontal tubercles (but these structure rather indistinct, causing the anterior parts of the frontal tubercles to be contiguous or almost fused with the posterior part of post-clypeus); surface of post-clypeus sparsely scattered with extremely fine punctures only visible under a high power lens, and the interspaces of these punctures smooth and shining, but sparsely pubescent along the lateral margins of its lower dilated area. Antennae subfiliform, extending a little beyond the middle of elytra, rather closely covered with fine pubescence except for two or three basal segments rather sparsely pubescent.

Pronotum transverse, subquadrate, about 1.7 times as broad as long, anterior angles obliquely truncate, sides nearly straight, widest at the part a little before the middle, slightly narrowed posteriorly and converged at a point just behind the anterior angles; anterior margin not bordered for its whole length, feebly sinuated inwardly in the middle; basal margin narrowly but rather distinctly margined, gently rounded with a slight sinuation in its median part and also in both lateral parts of the median sinuation; disk rather strongly convex and impressed near the base with an extremely shallow and indistinct sinuated transverse depression; punctures on pronotum rather indistinct, but under a high power lens seen to be scattered with fine punctures, interspaces of which are smooth and shining. Scutellum subtriangular, with the apex rounded and the surface nearly smooth and shining.

Elytra somewhat broader at the base than prothorax, nearly parallel sided in its anterior half and gently narrowed posteriorly, with the apex rounded, somewhat convex above, highest at the post-median area, with the humeral portion and post-basal area of each elytron either somewhat or feebly prominent; surface

of elytra finely and confusedly punctured throughout, the punctures a little more stronger than those of pronotum, whose interspaces are nearly smooth and shining. Elytral epipleura horizontal or somewhat obliquely placed, broad in its basal part with a feeble but broad sinuation in its inner margin, gently narrowed posteriorly and almost reaching the apex of each elytron, the surface nearly flat (but feebly channeled in its apical part), nearly smooth and impunctate, but under a high power lens seen to be sparsely scattered in part, with the extremely fine microscopical punctures together with an indistinct extreme inner marginal row of punctures in its median part, and the apical part sparsely pubescent.

Underside finely pubescent-punctate; prosternal process comparatively narrow, but distinct between the coxae, somewhat dilated behind with the posterior end rounded; surface of prosternal process prominent, with the lateral and posterior area along the margins rather distinctly channeled; mesosternal process broad, sides margined, very feebly sinuated inwardly, gently narrowed posteriorly, with the posterior margin rather distinctly emarginated, and roughly structured nearly for its whole surface.

Length: 2.5 mm.

Holotype: ♀, Yuwan, Amami-Oshima, Ryukyu, 22-V-1960, M. Ohno leg. (in the author's coll.).

Distribution: Ryukyu (Amami-Oshima).

The present new species is closely related to *Zipanginia picipes* (Baly) from Japan, but may easily be separated from the latter by the following characters:—

Body somewhat more elongate; colour of the dorsal surface entirely dark metallic green, with the anterior four legs and posterior tibiae and tarsi entirely reddish brown; lateral margins of pronotum nearly straight; posterior corner of the anterior truncated angles of pronotum not distinctly produced laterally; anterior margin of pronotum with a sinuation in its median part; extreme apex of each elytron rounded, not truncated or subtruncated; elytral epipleura longer, almost reaching the apex of elytron; mesosternal process narrowed posteriorly, etc.

The author wishes to express his hearty thanks to Prof. T. Adachi of Toyo University and Prof. M. Chûjô of Kagawa University, for their kind guidance and advice. Many thanks are also due to Messrs. H. Kajimura, T. Kato, and H. Maebara, for their kind help in collecting the material.